Application No.: 10/016,998
Office Action dated April 5, 2006

## **REMARKS/ARGUMENTS**

Entry of this response and reconsideration and allowance of the aboveidentified patent application are respectfully requested.

Applicant respectfully requests the Examiner consider and initial the references cited in the previous Information Disclosure Statement (submitted July 18, 2005), which cites only forty additional references (not an additional 300 as mentioned in the Office Action).

Upon entry of this amendment, claims 1-8, 10, 13-18, 20-24, 26-41, 43-46, 50-59, and 61 will be pending in the application. By this amendment, claims 1 and 58 are amended. Claims 11 and 19 have been canceled. No claims have been added. No new matter is added. Applicant respectfully submits that, upon entry of the subject amendment, the application will be in condition for allowance. Applicant, thus, respectfully requests consideration of the above amendment and following remarks.

In the pending office, action claims 1, 2, 5-8, 10, 11, 13-24, 26-40, 43-46, 50-59 and 61 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,282,405 to Brown ("Brown") in view of U.S. Pat. No. 6,452,482 to Cern ("Cern") and U.S. Pat. No. 6,278,357 to Croushore et al. (Croushore). Claims 3, 4, and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Cern and Croushore as applied to claims 1 and 36 above, and in further view of U.S. Pat. No. 5,630,204 to Hylton et al ("Hylton").

Briefly, the present invention forms a part of communications system and, in one embodiment, may include a fiber optic interface device configured to provide communications over a fiber optic network and a power line. In one embodiment the fiber optic interface device may include a modem, a fiber optic transceiver, and a router. In addition, the fiber optic interface device may be communicatively coupled to a transformer bypass device.

Independent claims 1 and 58 have been amended to clarify that the "data" is routed.

Independent claims 1, 20, 36 and 58 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Cern and Croushore. Generally, and in

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addition to other elements, claims 20 and 36 require a modem, a router, and a fiber optic transceiver. Claims 1 and 58 include similar limitations in method form.

Applicant submits that the transceiver/modems depicted in the schematics of Figures 2-4 represent a transceiver <u>or</u> a modem that may be disposed at or near the building (See Figure 1). The figures simply illustrate the flow of data from a first transceiver/modem, to a first network conditioning unit, to a second network conditioning unit, to a second transceiver/modem. For example, in Figure 2 the speech or data may be modulated by a first modem and transmitted to a first network conditioning unit 52A that couples the data signal onto a power line for reception by a second network conditioning unit 52B. The second network conditioning unit 52B may then provide the data signals to a second modem, which may output the speech or data. Thus, the transceiver or modem disclosed by Brown cannot be construed as the transceiver and modem combination as claimed.

Furthermore, the network conditioning units of Brown, shown in Figures 6-11, only include filters for separating out the power network from the communication networks and do not include a modem (or modulating) as required by claims 20, 36, and 58. (See also col. 8, II. 16-21). In fact, the text of Brown does not mention or include the word "modem" or "transceiver". In addition, Brown fails to disclose routing data or a router as required by claims 1, 20, 36, and 58.

In summary, Brown fails to disclose:

a fiber optic transceiver;

a modem and a transceiver; or

a router:

as required by claims 20, 36, and similarly required in claim 58.

The Office Action relies on Cern to disclose a router (and transformer bypass device required for claim 1). The office action concedes that Cern fails to disclose a fiber optic transceiver and router together, but instead relies on Croushore asserting that it discloses a fiber optic transceiver and modem together.

Cern, however, teaches away from the claimed invention. Specifically, Cern discloses a system for communicating over the medium voltage (MV) power lines (or neutral conductors) and low voltage power lines. Much of the disclosure is directed

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to various inductive and capacitive couplers for coupling to the MV power lines. See Figures 1-3C, 4A-5B, 7, 8, and 11A-B thru 16. The Cern patent also reads:

Internet access, which requires "last mile" connectivity between the Internet data trunk and each domicile, would greatly enhance the utility of such networks.

... A medium voltage power distribution grid feeds many homes and businesses via distribution transformers. If data is present on the medium voltage power grid, it would be desirable to couple broadband data streams from transformer substations to entire sections of a neighborhood, but the distribution transformers effectively block high frequency energy and thus block the data from getting to the LV drop lines.

Col. 1, lines 24-37.

Consequently, Cern discloses a communication system that uses power lines for the last mile – specifically the medium voltage and low voltage power lines. Consequently, Cern teaches away from connecting a fiber optic cable to a device connected to the power lines as required by the claims. Thus, there would be no motivation to combine the disclosures of Brown, Cern, and Croushore to arrive at the inventions claimed in the independent claims. Applicant therefore submits that it is inappropriate to combine the teachings of Cern with those of Croushore and/or Brown to arrive at the invention as claimed.

Consequently, Applicant submits that claims 1, 20, 36 and 58 are allowable over Brown in view of Cern and Croushore. In addition, because a claim that is dependent from a patentably distinct claim is also patentably distinct, Applicant respectfully requests allowance of claims 2-8, 10, and 13-18, which depend from claim 1, claims 21-24 and 26-35, which depend from claim 20, claims 37-41, 43-46, and 50-57, which depend from claim 36, and claims 59 and 61, which depend from claim 58.

In view of the foregoing, it is respectfully submitted that the claimed invention is patentably distinguished over the asserted prior art references and that the application stands in condition for allowance. It is respectfully requested that the application be reconsidered, that all pending claims be allowed, and that the application be passed to issue.

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## CONCLUSION

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact Mel Barnes at (301) 581-0081, to discuss any other changes deemed necessary in a telephonic interview.

If an additional extension is necessary for this amendment to be considered timely filed, a written conditional petition therefore is hereby made. Authorization is hereby granted to charge any deficiencies in fees, including any fees for extension of time under 37 C.F.R. §1.136(a), to Deposit Account 50-3970. Please credit any overpayment in fees to the same deposit account.

Date: October 1, 2007

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